

Needle bearing universal joints – precision at high rpm

Broadview (Chicago), Illinois, July 2005. Universal joint manufacturer Belden Inc. introduces a redesigned needle bearing universal joint. The joints are equipped with sealed lubricated needle bearings, making the joints practically maintenance free while operating precisely at high rpm for extended periods. The needle bearing universal joint has been redesigned to accommodate the mechanical linkage requirements of various industries including packaging and conveying, printing processes, agricultural equipment, medical equipment, industrial utility vehicles, race cars, machine tools and aerospace applications.

Belden needle bearing universal joints provide precise positioning and can operate continuously at high speeds. The needle bearing universal joint is designed to maintain low backlash for critical positioning applications, as required by robotics and instrumentation, for example, and are excellent for continuous operation applications. The joint has rigid axial stiffness for push/pull loads and can handle higher angles and rpm. It also has the capability to be rebuilt when wear and tear occurs – a Belden exclusive.

The needle bearing universal joint is available in a wide variety of hub materials, including high grade alloy steel, various grades of stainless steel and an extruded aluminum for high strength to weight ratios. A wide selection of specialty platings is also available for additional corrosion resistance. Boot covers are recommended in gaseous and abrasive environments for added protection of the cross and bearing. Needle bearing universal joints are manufactured in both inch and metric sizes and operating angles up to 45°.

Company information:

Belden Inc., located in Broadview, Illinois, near Chicago, can be traced back to the year 1939, when three brothers opened a precision machine shop. Through the development of an extensive product line, the company rapidly expanded. In 1968, Belden Inc. was established and began manufacturing high quality, precision universal joints for a variety of applications, creating a primary focus for the company.

Today, Belden manufactures an extensive selection of universal joints and drive shaft assemblies for the packaging and conveying industry, industrial off-highway vehicles, steering linkage, shift linkage, paper converting, steel processing, wood working machinery, drilling and tapping machinery, medical equipment, agricultural equipment and the bowling industry.

Belden universal joints are available in heavy duty, high strength, leveler strength and needle bearing, in various materials and platings. Belden's specialty is custom assemblies such as customized hub configuration, length or the complete redesign of joints for specific applications.

